least in part on said estimated aggregated data consumption rate for each said plex and said monitored number of outstanding I/O requests for each said plex.

5   112.   The method of claim 111, further comprising:

determining a maximal number of outstanding I/O requests for each said plex, and determining an estimated workload distribution across said at least two storage devices or at least two partitioned groups of storage devices based at least in part on said monitored

10   maximal number of outstanding I/O requests for each said plex; and

wherein said estimated total number of viewers for each of said at least two storage devices or at least two partitioned groups of storage devices is determined based at least in part on said estimated total number of viewers for each said plex and said

15   estimated workload distribution for each of said respective at least two storage devices or at least two partitioned groups of storage devices; and

wherein said estimated aggregated data consumption rate for each of said at least two storage devices or at least two partitioned groups of storage devices is determined

20   based at least in part on said estimated aggregated data consumption rate for each said plex and estimated workload distribution for each of said respective at least two storage devices or at least two partitioned groups of storage devices.

25   113.   The method of claim 111, wherein each of said storage devices comprise storage disk drives.

114. The method of claim 107, further comprising determining a maximal total number of viewers per storage device and a maximal aggregated consumption rate storage device or per partitioned group of storage devices.

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115. The method of claim 114, wherein said I/O resources comprise I/O capacity; and wherein said method further comprises modeling said I/O capacity based at least in part on said determined maximal total number of viewers per storage device or per partitioned group of storage devices, and said determined maximal aggregated consumption rate per storage device.

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116. The method of claim 115, wherein said at least one of said I/O resources further comprise buffer memory space of said information management system; and wherein said method further comprises managing said I/O resources by balancing said I/O capacity with said buffer memory space to ensure uninterrupted delivery of said continuous media data to said plurality of viewers from said at least two storage devices or said at least two partitioned groups of storage devices; wherein said balancing is based at least in part on said determined maximal total number of viewers per storage device or per partitioned group of storage devices, and said determined maximal aggregated consumption rate per storage device or per partitioned group of storage devices.

117. The method of claim 116, wherein method further comprises performing I/O admission control, determining read-ahead size, or a combination thereof; wherein said performance of I/O admission control and determination of read-ahead size are based at least in part on said determined maximal total number of viewers per storage device or per partitioned group of storage devices, and said determined maximal aggregated consumption rate per storage device or per partitioned group of storage devices.

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118.   The method of claim 117, wherein said method comprises performing I/O admission control by determining whether or not a capacity of said system is sufficient to support at least one additional viewer based at least in part on said balancing of said I/O capacity with said buffer memory space.

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119.   The method of claim 117, wherein said method comprises determining read-ahead size by setting a cycle time based at least in part on said balancing of said I/O capacity with said buffer memory space; and determining a number of read ahead data blocks based at least in part

10   on said cycle time, determined maximal aggregated consumption rate per storage device or per partitioned group of storage devices, and a size of said data blocks.

120.   The method of claim 117, wherein said method comprises performing said I/O admission control by determining whether or not a capacity of said system is sufficient to support at least

15   one additional viewer based at least in part on said balancing of said I/O capacity with said buffer memory space; and wherein said method further comprises determining read-ahead size by setting a cycle time based at least in part on said balancing of said I/O capacity with said buffer memory space; and determining a number of read ahead data blocks based at least in part

20   on said cycle time, determined maximal aggregated consumption rate per storage device or per partitioned group of storage devices, and a size of said data blocks.

121.   The method of claim 107, wherein said logical monitoring comprises monitoring the

25   following system I/O performance characteristics for each logical volume, for each plex within a logical volume, and for each storage device or partitioned group of storage devices within a plex: (A) total number of viewers, (B) aggregated data consumption rate, (C) current weight of workload on a storage device in a plex, and (D) number of outstanding I/O requests for each storage device or partitioned group of storage devices.

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